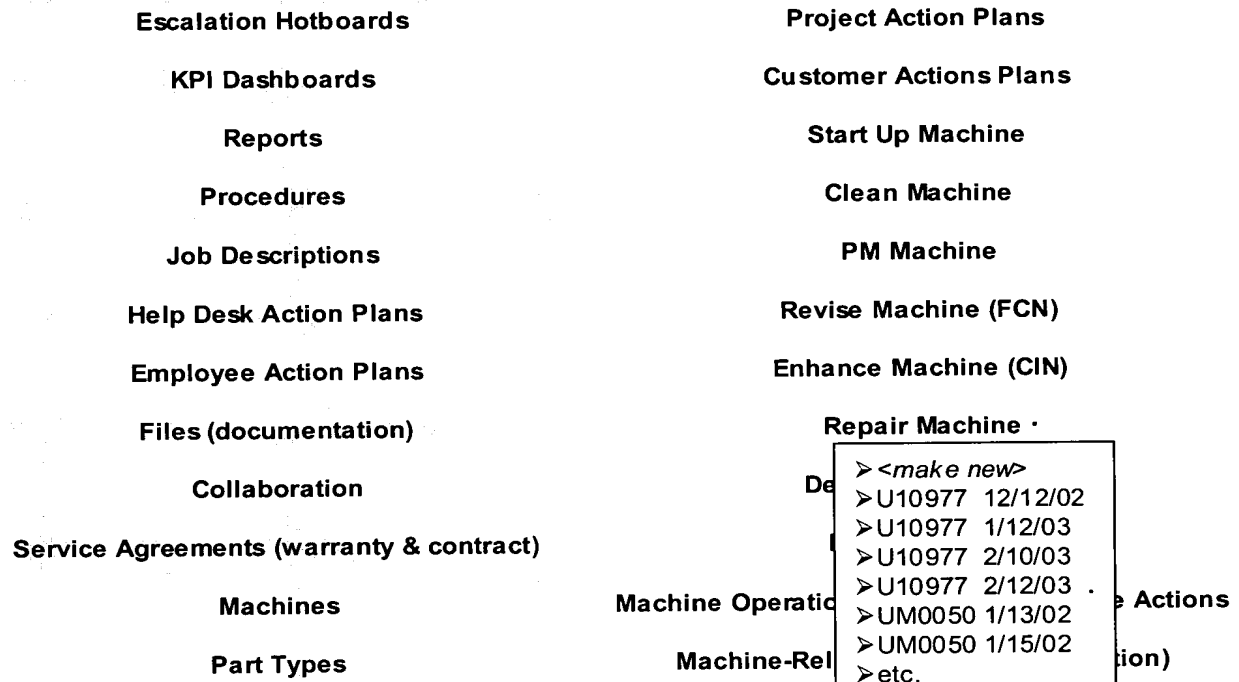


FIG. 1

ANSWER MAIN MENU

Download
Client

Search



= Also available on offline client application for the majority of employees that work offline in the fab.

FIG. 2A

REPAIR MACHINE

Machine S/N:	U10977
Process Chamber S/N:	PC2-23244
Process Type:	Via
Purchasing Account:	Machine Warranty, Service Agreement # 434, 11/1/02 to 10/31/03 (unless otherwise specified, all parts will be billed this account)

Confirm / Enter Information & press ENTER.

ENTER

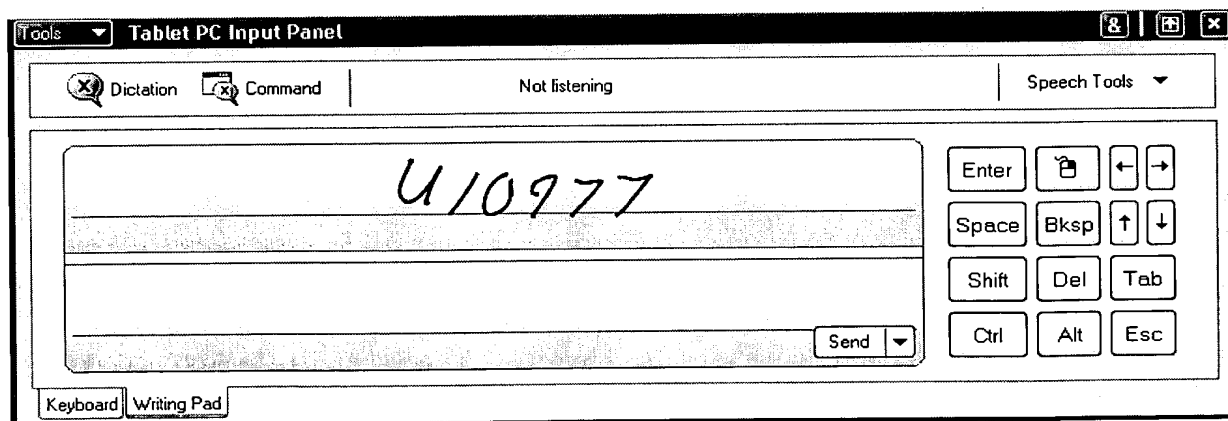


FIG. 2B

U10977 REPAIR HISTORY

Here's a list of test that have failed on this machine & actions taken. If you see the current problem occurring often over the past few weeks, be careful to isolate the true cause & avoid repeating ineffective corrective actions.

Date	Type of Work	Description	Appears Ineffective*	Reason/s
2/10/03	Corrective Action	Replaced Matcher (ES1D80-34322-12)	v	Same action was taken earlier this week.
2/10/03	Test	51A5		
2/7/03	Corrective Action	Replaced Matcher (ES1D80-34322-12)	v	1. Same failure occurred later thatweek. 2. Factory failure analysis of part found no problem.
2/7/03	Test	51A5		
2/7/03	Test	C4F8 Flow		
2/2/03	Corrective Action	Calibrated Forward RF	v	Same failure occurred later thatweek.
2/2/03	Test	51A5		
1/11/03	Corrective Action	Replaced Manometer (ES1880-55991-01)		
1/11/03	Test	3A32		
1/11/03	Test	2A32		
12/21/02	Corrective Action	Cleaned Process Chamber		
12/21/02	Test	Particles		
12/21/02	Test	Yield		
10/7/02	Corrective Action	Adjusted Needle Valve		
10/7/02	Test	2B44		
9/25/02	Corrective Action	Reset Main Controller		
9/25/02	Test	5994		
9/1/02	Corrective Action	Replaced Matcher (ES1D80-34322-12)		
9/1/02	Test	51A5		
5/17/02	Corrective Action	Aligned Baffle Plate		
5/17/02	Test	Etch Rate		
5/16/02	Corrective Action	Replaced ESC (ES1D50-65921-15)	v	Same failure occurred later thatweek.
5/16/02	Test	Selectivity		
5/16/02	Test	Non-Uniform		
5/16/02	Test	Etch Rate		
3/5/02	Corrective Action	Aligned Robot		
3/5/02	Test	2299		

* If appears ineffective, the case is not included in interactive case study.

FINISHED

FIG. 2C

SELECT TEST THAT FAILED:

51A5

61A5

Matcher Mode Setting.

PC Leak Rate.

C4F8 Flow.

Forward RF Power.

RF Cable TDR.

Gap Drive Chain Tension.

Lift Pin Home Position.

Focus Ring Thickness.

Water Flow.

Nitrogen Purge Pressure.

Software Parameter Setting.

▲

▼

Type here & press button below.

MANUALLY ENTER A NEW TEST THAT FAILED:

FIG. 2D

DESIRED RESULTS

Lower Failure	Lower Warning	Target	Upper Warning	Upper Failure	Should Be	Units	Based Only On Opinion
		Not Occurring			Equal To		No

ENTER ACTUAL RESULT

Occurring

FAILED

ENTER

COMMENTS

ATTACH FILE

FIG. 2E

CURRENT CASE

Parts Associated With This Case

Source	Part	P/N	S/N	State	Green = Acceptable Final State

Tests & Corrective Actions Completed On This Case

Order	Tests & Corrective Actions	Not Previously Done On Matching Cases	Cases That Still Match
1	Test = 51A5.		30

Add Another

Tests & Corrective Actions Planned For This Case

Order	Tests & Corrective Actions	Not Previously Done On Matching Cases

Add Another

INTERACTIVE CASE STUDY

Filter

Tests Completed On Matching Cases

Rank	Test	Cases That Will Be Left If Test Originally:	
		Passes	Fails
1	Matcher Mode Setting.	21	9
2	PC Pressure Control.	21	9
3	C4F8 Flow.	23	7
4	Forward RF Power.	24	6
5	RF Cable TDR.	29	1

Corrective Actions Completed On Matching Cases

Rank	Corrective Actions	Previously Tried On Matching Cases And:	
		Corrected	Didn't Correct
1	Replaced Matcher.	10 (33%)	6
2	Replaced C4F8 MFC.	4 (12%)	0
3	Calibrated Forward RF Power.	4 (12%)	4
4	Taught APC.	4 (12%)	0
5	Replaced RF Gen.	2 (7%)	4
6	Replaced RF Cable.	1 (3%)	1

FIG. 2F

CURRENT CASE

Parts Associated With This Case

Source	Part	P/N	S/N	State	Green = Acceptable Final State

Tests & Corrective Actions Completed On This Case

Order	Tests & Corrective Actions	Not Previously Done On Matching Cases	Cases That Still Match
1	Test = 51A5.		30
2	Test = Matcher Mode Setting.		21
3	Test = PC Pressure Control.		15
4	Test = C4F8 Flow.		4

Add Another

Tests & Corrective Actions Planned For This Case

Order	Tests & Corrective Actions	Not Previously Done On Matching Cases

Add Another

INTERACTIVE CASE STUDY

Filter

Tests Completed On Matching Cases

Rank	Test	Cases That Will Be Left If Test Originally:	
		Passes	Fails

Corrective Actions Completed On Matching Cases

Rank	Corrective Actions	Previously Tried On Matching Cases And:	
		Corrected	Didn't Correct
1	Replaced C4F8 MFC.	4 (100%)	0

FIG. 2G

REPLACE C4F8 MFC

Part Number:	ES1D80-43532-02	(based on S/N's of machine & P/C and P/N entered at startup or previous service call)
Quantity:	1	
Purchasing Account:	Warranty	(based on machine's service agreement & whether part is consumable)
Shipping Requirement:	Need Part Shipped	
Shipping Priority:	Next Flight Out	
Shipping Address:	2302 Main St. Phoenix, AZ, 54543, Attn: Bill Anderson	
ETA Requirement:	Yes	
Approval Status:	Pre-Approved for Warranty purchase because: 1. Case has occurred frequently In the past & engineer followed the historical troubleshooting methods (BKM's) & isolated to a single part. 2. Part costs less than \$5000. 3. Part wasn't recently replaced on this machine.	

Confirm / enter information, connect to Server, & press UPLOAD REQUEST.

**UPLOAD
REQUEST**

**EXIT WITHOUT UPLOADING
(POSSIBLY WANT TO REPLACE
MULTIPLE PARTS).**

FIG. 2H

CURRENT CASE

Parts Associated With This Case

Source	Part	P/N	S/N	State	Green = Acceptable Final State
TEA	C4F8 MFC	ES1D80-43532-02	55453324	Received.	

Tests & Corrective Actions Completed On This Case

Order	Tests & Corrective Actions	Not Previously Done On Matching Cases	Cases That Still Match
1	Test = 51A5.		30
2	Test = Matcher Mode Setting.		21
3	Test = PC Pressure Control.		15
4	Test = C4F8 Flow.		4

Add Another

Tests & Corrective Actions Planned For This Case

Order	Tests & Corrective Actions	Not Previously Done On Matching Cases
1	Corrective Action = Replace C4F8 MFC.	

Add Another

INTERACTIVE CASE STUDY

Filter

Tests Completed On Matching Cases

Rank	Test	Cases That Will Be Left If Test Originally:	
		Passes	Fails

Corrective Actions Completed On Matching Cases

Rank	Corrective Actions	Previously Tried On Matching Cases And:	
		Corrected	Didn't Correct
1	Replaced C4F8 MFC.	4 (100%)	0

FIG. 2I

REPLACE C4F8 MFC

1. Pump out gas line.
2. Test leak rate of gas line.
3. Purge gas line.
4. Loosen VCR fittings.
5. Disconnect MFC cable.
6. Remove MFC.
7. Install new MFC.
8. Tighten VCR fittings.
9. Pump out gas line.
10. Test leak rate of gas line.

Finished

Feedback
(Document Change Request)

FIG. 2J

CURRENT CASE

Parts Associated With This Case

Source	Part	P/N	S/N	State	Green = Acceptable Final State
TEA Machine.	C4F8 MFC	ES1D80-43532-02	55453324	Installed.	
	C4F8 MFC	ES1D80-43532-02	83458325	Removed.	

Tests & Corrective Actions Completed On This Case

Order	Tests & Corrective Actions	Not Previously Done On Matching Cases	Cases That Still Match
1	Test = 51A5.		30
2	Test = Matcher Mode Setting.		21
3	Test = PC Pressure Control.		15
4	Test = C4F8 Flow.		4
5	Corrective Action = Replaced C4F8 MFC.		

Re-check failed tests since a corrective action was done.

Add Another

Tests & Corrective Actions Planned For This Case

Order	Tests & Corrective Actions	Not Previously Done On Matching Cases

Add Another

INTERACTIVE CASE STUDY

Filter

Tests Completed On Matching Cases

Rank	Test	Cases That Will Be Left If Test Originally:	
		Passes	Fails

Corrective Actions Completed On Matching Cases

Rank	Corrective Actions	Previously Tried On Matching Cases And:	
		Corrected	Didn't Correct

FIG. 2K

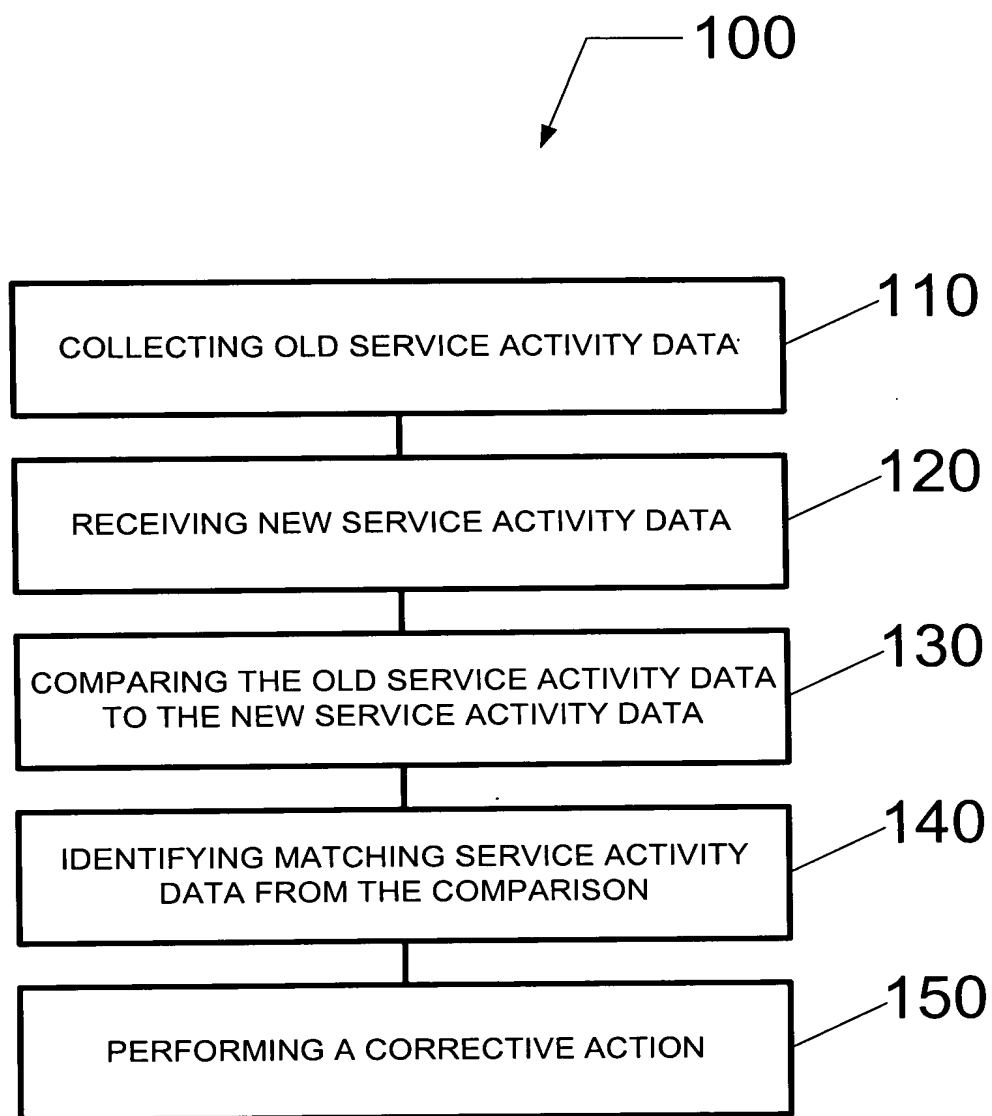


FIG. 3

FIG. 4

